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# Appropriateness of Extension Services of Small- Scale Industry

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**Abstract** - Since Bangladesh is an agriculture dependent and over-populated country, so the over manpower should be made as resource through industrialization of the country. It is evident that the excess manpower lie mainly in agriculture sector and as small-scale industry sector is labor-intensive and small capital-requiring industry, so this paper has emphasized on the development of small-scale industry sector. This paper is explanatory in nature and data have been collected for conducting the study mainly from secondary sources. The main objective of the study is to find out the need-based appropriate extension service for small-scale industry sector. In order to present the appropriateness of extension services for the development of small-scale industry, the researcher has concentrated to find out the usual/major and even the trifling problems faced by the small-scale industrial units as well as small industrialists at first and then scrutinize the suitability of different types of extension services to remove the problems of this sector.

**Keywords** : *Itinerant, Staffing, Development, Extension Service, Voluntary, Close-Mutual, Close Counseling, Demonstration.*

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*Strictly as per the compliance and regulations of:*



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Finally the researcher has tried to recommend some effective measures to overcome the problems that are facing by small-scale industry sector.

**Keywords** : Itinerant, Staffing, Development, Extension Service, Voluntary, Close-Mutual, Close Counseling, Demonstration.

## I. INTRODUCTION

Bangladesh is an agriculture dependent and overpopulated country. It is also evident that agriculture sector is overmanned one. The excess manpower of this sector should be shifted to other sectors for employing the excess manpower of one in particular as well as unemployed people of the country in general. As the small-scale industry sector is laborintensive and small capital-requiring one as well as the raw materials to be required for manufacturing goods of this sector may largely be of agriculture sector, so this sector may solve the unemployment problem of the country in easier manner to a great extent than that of other sectors. Over and above, small-scale industry sector can increase foreign exchange earning through exporting its product abroad as well as reduce cash outflow for importing goods through manufacturing indigenous goods. Thus export-import imbalance of the country to some extent might be minimized. In fact, after the independence of Bangladesh, the government has been undertaking different initiatives in different plan-period for the development of this sector. But it is a matter of great regret that no industry-matching and need-base initiative has ever been undertaken and the initiatives that are undertaken have been properly implemented and monitored neither by the government nor by any small industrialists' associations. So, employment generation and contribution to G.D.P. of this sector till to date is not up to the expectation though these have been being increased for years together. In the consequences, it may be concluded that the development scenario of small-scale industry in Bangladesh is not remarkable. A statistics may be presented in respect of this.

Agriculture sector employs 79% and 59% of labor force in mid 70's and mid 80's respectively whereas in 2002-2003 this sector employs 51.69% of labor force following the industry sector 13.56%. So, it is evident here that the employment rate of agriculture sector has been declining over the years. Again, the contribution of agriculture sector to G.D.P was 33.07%,

29.23%, 25.03% and 21.11% in the year of 1980, 1990, 2001-2002 and 2006-2007 respectively. On the other hand, the contribution of industry sector to G.D.P in those years was 17.31%, 21.04%, 26.20% and 29.77% respectively (Economic Review Bangladesh; 2007:24). It is evident from another review that agriculture sector employs the highest number of labor force which is 43.6% of total labor force where as the industries sector employs 13.56%. At the same time, the contribution of agriculture sector to GDP is 20.29% where as the contribution industries sector to GDP is 29.93% in 2009-2010 (Economic Review of Bangladesh-2011:20).

From the above discussion, it is realized that various reasons are responsible for slow development of small-scale industry sector. For rapid and expected development of small-scale industry sector, the problems prevailing in this sector should be found out and accordingly they should be solved immediately considering as the prioritized sector. For the development of this sector as well as substantial economic development of the country, extension services to this sector would be provided and expanded in proper form. To this end, the problems that are faced by small-scale industries are presented in the following sections.

Some processes are to be maintained in manufacturing and selling goods of small firms. If they are to be efficiently performed and have to be carried out on a larger scale, the cost of product would be minimized and accordingly profit would be maximized. To operate the concern/firm efficiently or reduce the cost of production or maximize the profit, it is evident that promotion and extension services should be provided properly to the small industrialist.

Large firms may employ specialists on their own staffs to provide all these services. If a small firm, which has no capability to provide these services - has no own specialist or ability to hire such type of specialists but it needs such type of services. Such type of small industries do not get any facility or advice from any corner i.e. neither government nor private initiative because of their smallness. Considering this point of view as well as the economic development of the country, the progress of small-scale industries sector is a prime need for a developing country. So there is no scope to avoid such type of extension services for small-scale industries - for owners, managers as well as staffs in a developing country like Bangladesh.

If the needs of small firms as already pointed out to some extent are provided in proper form, the wholesalers and retailers can achieve economies by handling the products of many different producers and thus relieve the small industrialists in many lines. But in fact, many small managers, in highly developed as well as less developed countries, are not aware of their own needs and in some cases even if they are aware of their

needs, they cannot afford to hire advisory or research services on a commercial basis. Especially in industrially less developed countries, there is likely to be little or no effective market demand among small firms for the kinds of services that management consultants and research institute can provide. There is scope and need for action the government and associations of small producers to provide services and facilities for small industries that may develop the existing state of the industry.

Actually, extension services have an important role to play in this connection. The main extension services are advisory/consultancy, training, information and as a supporting activity, research services. Most of the developing countries cannot maintain coordination and cooperation among the concerned agencies as well as public and private initiatives for providing extension services to small-scale industries. This paper is concerned with certain general problems for small-scale industry of Bangladesh. The researcher makes his effort to find out the problems prevailing in small-scale industry sector and examine the adequacy and appropriateness of extension services those are provided for the development of small-scale industry and ultimately recommend some measures to overcome the problems of this sector in this paper in respect of Bangladesh. The findings of the study may be utilized for the policy makers of Bangladesh as well as for other developing countries of the world also. In Bangladesh, it is evident that though the government has been extending hands for the progress of small-scale industries for years together but there is a lack of evaluation, implementation and monitoring activities of the undertaken projects. Over and above, though there are some small-scale industrialists' associations in Bangladesh as stated earlier, but in practice, they have no significant role for the betterment of small-scale industries or small industrialists. It is also evident that there is no cooperation and coordination among the ministries, departments or agencies concerned as well as between the state assistance and voluntary efforts in Bangladesh. Since, the economic emancipation of an over-populated and developing country like Bangladesh depends upon the generation of employment opportunity and utilization of indigenous raw materials through the development of small-scale industry sector and the development of this sector is mainly dependent on providing appropriate extension services, so the researcher has undertaken the research topic titled, "Appropriateness of Extension Services of Small-Scale Industry."

## II. OBJECTIVES OF THE STUDY

The main objective of the study is to find out the need-based appropriate extension service for small-scale industry sector and the specific objectives are:

- i) To identify the different problems regarding extension services those are facing by small-scale industry as well as small industrialists
- ii) To examine the cooperation and coordination between the government agencies and voluntary associations
- iii) To way out the owners and managers to be aware of their needs and acknowledge them about new technology
- iv) To select the need-based appropriate extension services for the development of small-scale industry sector
- v) To suggest some possible measures and the acceptable methods/approaches for identifying the problems and select appropriate extension services for the development of small-scale industry sector.

### III. METHODOLOGY

Mainly secondary data have been collected for conducting the study. Data have been collected from industrial policies prepared in different plan period in Bangladesh. Beside these, annual report of BSCIC, Published official documents, Newspaper, Statistical book, Economic review of Bangladesh, Economic trend of Bangladesh and so on. A few primary data have been collected through interviewing with the executives of BSCIC, SCITI, SDC and ministry of industry as per the interview schedule. Quantitative and qualitative data have been discussed and analyzed in the study. For obtaining the significant and pragmatic result of the research work as well as the convenience of conducting the study as much as possible the aspects those may affect the small-scale industrial development have been discussed in this paper.

### IV. ORGANIZATION OF THE STUDY

This study is explanatory in nature. For bringing smoothness and fluency in discussion, this paper has been organized with seven sections. These are as follows:

*Section I* produces the brief introduction with an endeavor to give an idea on the necessity of extension services to small-scale industry, nature of the study, statement of the problem and justification of the study.

*Section II* sets the main and some specific objectives of the study.

*Section III* highlights the methodology of the study.

*Section IV* is the organization of the study that consists of the highlights of different sections of this paper.

Discussion and analyses of the study have been made in section V dividing into twelve sub-sections.

*Section V.I* discusses the role of different international organizations in developing the small-scale industry sector.

*Section V.II* focuses on the different problems of organization of small-scale industrial units.

*Section V.III* emphasize on the cooperation between government agencies and voluntary associations of small-scale industry.

*Section V.IV* presents the essence of coordination of different government agencies or bodies.

*Section V.V* has made an effort to acknowledge the different types of organization prevailing in small-scale industry and ultimately recommended a suitable organogram for different types of small-scale industries.

*Section V.VI* ways out a financing as well as staffing arrangement that would be beneficial for the small industrialists. It also discusses different problems of financing in small-scale industries.

*Section V.VII* describes some approaches and their techniques and strategies of providing extension services to different small-scale industry.

*Section V.VIII* highlights of several important extension services.

*Section V.IX* has focused on the necessity and applicability of demonstration or model plant for providing training consultancy and information to small industrialists, employees and workers also.

*Section V.X* emphasizes on demonstration and training plant for providing extension services to small industry sector.

*Section V.XI* presents the role of itinerant demonstration and training teams for similar type problematic small industry.

*Section V.XII* produces the necessity and technique of creating market of the small industrial products.

*Section VI* finds out some findings of the conducted study.

The final section suggests and recommends some possible measures to overcome the problems of small-scale industry sector.

### V. DISCUSSION AND ANALYSIS

#### V.I Role of International Organizations

It is common belief and fact that the shortage of qualified personnel is a major obstacle in the development of small-scale industry in the less developed countries. A limited but important contribution towards overcoming this shortage can be made through the technical assistance that is available to less developed countries through international organizations or on a bilateral basis from individual more developed countries. Such assistance makes provision both for placing temporarily at the disposal of the less developed countries experts and specialists from more developed countries and through fellowships, for the training abroad of selected nationals from the less developed countries.

Under the Expanded Technical Assistance Programme of the United Nations and its specialized agencies help is available at the request of government of individual countries or on a regional basis. Such help has been provided by the United Nations and the International Labor Organization in the field of handicraft and small-scale industries for a number of countries. (Services for Small-Scale Industry, I.L.O. 1961:53). Broadly speaking the United Nations is concerned with economic aspects of problems of promoting development and productivity in small-scale industries, while labor and social aspects are primarily matters for the I.L.O. which also has recognized contributions to make in matters of management development and the promotion of cooperative activities. The activities of the two organizations are closely related, they have cooperated in several joints projects. United Nations and I.L.O. experts have collaborated in carrying out surveys of possibilities of development of small-scale industries in different countries of the world.

Since the inception of the Technical Assistance Programme, experts have been provided by the I.L.O. and by the United Nations to government for surveying, advising, training personnel and assisting in carrying out programmes for developing small-scale industries. In some countries over-all surveys have been carried out and other special surveys have been conducted for particular areas or for the development of particular industries. Assistance has been provided for initiating and carrying out training and development programmes in handicrafts and small-scale industries within the framework of community development or fundamental education projects in Asia, The Middle East and Latin America. Advisory services have been rendered and training programmes conducted for the development of particular industries such as textiles, coir and other fibres, lacquerware, pottery, tiles, bricks and tanning and leather works.

As parts of its more general work to promote higher levels of productivity, the I.L.O. has also provided experts for a number of countries to help, chiefly by means of training and demonstration, in spreading knowledge of methods by which productivity may be increased. Several of these missions have provided successive courses about eight weeks duration in the elements of work study including practical work carried out by trainees in selected plants under the supervision of the experts. Though these productivity missions have been concerned with plants of all sizes and have not thus far given special attention to the problems of small-scale industry as such, some trainees have come from and some practical work has been carried out in relatively small plants.

The United Nations has extended assistance for the establishment of institutional facilities related to economic development, including technical research organizations and service institutes. The United Nations

and the I.L.O. have in addition, provided numerous fellowships for the training abroad of carefully selected persons from less developed countries in methods that will help them make valuable contributions to the development of small-scale industries in their own countries. Besides technical assistance, certain other activities of the United Nations and other international agencies have been designed to assist the less developed countries in promoting the development of their small-scale industries and in dealing with problems arising in connection with efforts in this direction.

### *V.II Problems of Organization*

There is considerable difference in pattern and emphasis of the services to help small-scale industrial managers in different countries. This diversity is to be expected in view of differing conditions, needs and resources in different countries and actually no one pattern or type of organization can be held up as a model to all countries.

There are, however, certain problems of organization that are encountered in varying forms in all countries. In the following section the researcher shall touch on the problems of the relationships between state assistance and voluntary effort and among different government departments or agencies; considerations regarding the degree of centralization and specialization of services appropriate in the different conditions; and finally questions of financing and staffing.

### *V.III Cooperation between the State and Voluntary Association*

The role of voluntary association of small producers is one important question of this section. Such associations are active in a number of countries. Accordingly there are some small industrialists' associations in Bangladesh, which have affiliation of central organization, BSCIC. These are the private organization, and their purposes are a) to represent the interest of artisans and small industrialists, in connection with legislation and related matters; and b) to further-technically, economically, socially and artistically- the development and progress of small-scale industry.

The various departments, Banks and the Corporation of Bangladesh have been furnishing numerous services to small industrialists, designed to assist them in the efficient conduct of their businesses and strengthen their competitive position. Recently, through the establishment of small-scale industry Sales centre with the initiative of Corporation and the Corporation has undertaken to promote the marketing of the product of handicrafts and small industries. In the expert field, the Corporation cooperates with privately owned company which has established sales organization in several markets for the export of different articles and other products of small-scale industries.

With the initiative of the Corporation, a training centre named SCITI (Small and Cottage Industries Training Institute) has been established which renders training services mainly to the officers and employees of BSCIC and at times it arranges some special training and counseling programmes for the entrepreneurs for building awareness among them. Besides, 15 skill development centres have already been established at different locations of the country. There is no so provision of encouraging measures/incentives for the trainees imparted. The training programmes that exist in Bangladesh are not worthy or effective for acquiring job for the unemployed people. After completion of the training programme, there is no pragmatic measure of evaluation and monitoring system by the concerned departments. The existence of a strong and effective association of small industrialists might help in pertaining training to the entrepreneurs and strengthen different government agencies involved in respect of extension services through holding reciprocal discussion and taking initiatives. The Government and the association of small producers are working together in various countries of the world. There are good reasons for trying to establish some sort of working partnership between Government and small producers in providing initiative and direction for extension services. It is noted here that the Government can provide resources, continuity and coordination that are made possible by an over-all view of the requirements of the national economy. Representatives of small producers can provide enthusiasm, ideas and voluntary work to the small industrialists.

In Bangladesh, it is mention worthy and matter of regret that the members of small producers association do not ever try for the betterment of this sector at all or for the other members rather they play a role of a broker through macsul-manism due to unethical takings in obtaining loan from different financial institutions and as such cooperate to divert the loan for their personal purpose. In a matter of fact, for healthy development of small-scale industry, a body may be formed that are exist in some countries of the world for providing appropriate extension services to small industry with the representatives of small producers association and of public and semi-public agencies/departments as well as with other interested quarters of the society who are capable to play positive role in this respect.

#### *V.IV Coordination of Government Agencies*

Ensuring the most fruitful cooperation between public and private efforts in this field may be the best solution to the problem in providing extension services to small-scale industry. There is no another best solution other than coordinating activities of the different government departments or other public agencies to the very real problem. Initiatives have to be taken to promote the healthy development of small-scale

industry among different government departments/bodies and at different levels - central, regional and local. Ministry of finance, Commerce and Industry, Labor and social welfare, and education may all be concerned with different aspects of work in this field. So also may government development Departments, Boards or Development Corporations in countries where these exist. Probably, it will be conducive to a good administration is to the avoid the worst features of bureaucracy and as such the main responsibility for carrying out such as government wishes to undertake to promote the development of small industry is entrusted to some one department, clear decisions having been taken and announced regarding a) the kind of help for which it can look central departments and b) the functions and responsibilities that are to be decentralized and entrusted to regional or local government bodies.

The definition of function and responsibilities of the different departments and agencies has to be determined as per the needs and requirements of small-scale industry after a careful study and an analysis of the factors that hampers its development. Since needs, requirements and conditions are changed over the course of time, a continuous programme of research into economic, social and technological problems of small-scale industry is called for, and decisions taken regarding the kinds of services to be provided and the way in which they are provided need to be reviewed from time to time in the light of research findings. If activities are not undertaken to aid small-scale industry based on careful study and analysis may be misdirected. For example, measures that might be appropriate to help certain small-scale undertakings for absorbing unemployed people in an area with a high population density may not be appropriate for large-scale industry. The measures or extension services may differ for a different socio-economic structure also. Usually, small firms is operated using hand-operated manufacturing techniques or in some cases, with vocational training. The trainees remain anxious whether the training and skills that are being imparted would be utilized or sufficient demand of ones would be created or not in future. Whether the efforts that are made for improving a backward technology would be fruitful or not without creating market of the products. In short, efforts may be abortive because they are ignorant what it is required in a given situation, or because they cannot succeed improving only one aspect of the problems that are facing whereas they might be very successful if accompanied by appropriate measures of other kinds. So, a careful study is necessary to take any initiative. Well designed research projects cannot throw only light on the urgency of different needs and the nature of obstacles to progress; research can and should also be designed to evaluate the result of efforts made and services provided.

### V.V Types of Organization

Extension service has to cater for different regions and for different industries, each having its specific problems and it has to provide different types of services - consultancy services, training or research. Questions arise as to how these different types of requirements are to be reflected in the organizational structure of the extension service or services. At one extreme, one might envisage a single central service, catering for all regions or all industries and providing all types of services, but its work is presumably have to be split up in some way of divisions or departments. At the other extreme, one might envisage a multiplicity of institutes or agencies, each providing one type of service for one industry in one region; but without some coordination there would almost certainly be a great deal of waste and overlapping. The important practical question in each case is how much autonomy is to be enjoyed by individual working units, whether they have sections, branches or departments of a centralized services or independent agencies subject to some of central coordination. Between the two extremes distinguished above the possible combination are legion. Some but not all, services may be provided on a national basis for all industries; other may be provided on a regional basis for all industries or on an industrial basis for all regions; yet other may be provided by institutes or agencies that are both decentralized by region or specialized to serve a particular industry. Besides, some problems will remain beyond these initiatives/extremes, which may be filled through special interference of the organization.

The guiding principles, mentioned above are not the best one solely. However, certain guiding principles may be suggested in first extreme, the purpose of centralization is to prevent waste and duplication and to ensure that so far as possible, important gaps in services are filled. Waste and duplication may arise if a unit is set up to provide some services that could be provided more effectively and economically by existing agencies. Often economies of scale may be achieved by providing certain services in combination and spreading their overhead cost. For example, some people who are equipped by training and experience to provide consultancy services are likely to be well qualified for "vetting and reporting on the merits of application for loans. They will be probably well qualified to provide at least certain kinds of training. Again, a laboratory equipped to test materials and products of a certain industry in a certain region may be able to provide the same services for the same industry establishing separate laboratories for each region. In fact, the centralization as well as decentralization move among other things, depend upon the size of a country. Such as, services may appropriately be much more centralized in a small country like Bangladesh than in a big country like India. As regards the question of the

specialization by industry the purely the technological problems of different industries are apt to be entirely different, but many of their more general management and marketing problems are very similar. While one would not expect the same expert to advice on, say, cutting speeds for machine tools and glazes for ceramics, one would expect that an expert in cost accounting could give useful advice both in small engineering works and in a small pottery. These differences between specialized technological problems and other more general problems of management need to be taken into account in organizing extension services.

A second general principle that may be suggested is that there is no virtue in centralization over and above what may be needed for the purpose indicated above. On the contrary, there is a strong case for the largest measure of decentralization that is compatible with adequate coordination and the achievement of the available economies of scale. Over-centralization tends to lead to bureaucratic red tape. Over and above, it is very much difficult to know the decision of people on the spot regarding local conditions and problems staying at remote location. Regional decentralization and specialization by industry may help to a great extent in possibly economic manner. In this case, small-scale managers have confidence in the experts who advice and help them, because these experts come from, or at least are very familiar with, their own regions and their own industries, and speak to them, literally and metaphorically, in their own language.

Thirdly one should hesitate, merely for the sake of imposing tidy and logical organizational pattern, to clip the wing of or otherwise interfere with an established service that is functioning well and meeting a need.

But there remains an interest in solving a question of how these various problems have been tackled in different region of the country as well as in different counties of the world. The following different bodies/team may solve the problem of providing extension services to small-scale industry.

- i) A group of field officers who pay visits to small undertakings and if necessary stay for days together at the industrial unit which seek their advice on a wide range of questions (for example, the establishment or extension of factories and problems of materials, product improvement, equipment, energy supply and financing). In Bangladesh, the BSCIC is performing such type of activities decentralizing its office in different districts as well as at different upazila also. But these activities would be beneficial for this sector if these are performed in above mentioned manner.
- ii) At least one chemical engineer stationed at each regional office and charged with assisting the field

officers on chemical questions, the field officers would be mainly of mechanical engineers. In district office of BSCIC, there are engineers but all of them are not skill enough to evaluate the trade-wise project i.e. not like of above structured.

- iii) A documentation and information service set up under the control of the patent office at each regional office of the corporation. The library of the documentation and information centre is thus made available to small-scale industrialists and field officers through the services of two engineers who advice on, and help to find documentation literature and technical information. Small manufacturers with new ideas can consult these engineers on the availability of applying for patents. These branches also operate an international mail inquiry service and serves as a centre for international contacts in the technical field. In divisional office of BSCIC, there is a library mere in the name of library but sufficient documents and information are not available here. Actually, it is confined within one or two almirahs of the office. In district office of BSCIC, there is no library.
- iv) An efficient team consisting of ten engineers stationed at each regional office to assist small industrialists on question of management and efficiency that are too specialized to be handled by the field officers or that call for more sustained work in individual plants than the field officer can combine with their other duties. On the request of a field officer a member of this team may visit a plant for a week or a fortnight, talk over the main problems with the management, study the situation and administration and make suggestion for improving the efficiency of operations.
- v) A handicrafts service consisting of some assistants stationed at various places throughout the country; and
- vi) A mechanical workshop with adequate number of mechanical engineers working on ideas for new machinery developed by small entrepreneurs and testing and demonstrating new machinery and production methods.

#### V.VI Financing and Staffing

Methods of financing services for small industrialists differ. Although in certain countries certain services are provided free in charge, there appears to be a good case of making some charge of service rendered to individual firms. For one thing, usually people are apt to value a service more highly if they have to pay something for it. So, it may be advised that a fee is payable only those small industrialists who are serious in their desire to make use of service. Secondly the fees strengthen the finances of service. A given amount of money provided from public sources will go further and permit setting up a more extensive and more useful organization if it is supplemented by fees. Thirdly,

a service that depends at least partly for its revenue upon fees voluntarily paid by users has an incentive to give satisfaction that may be lacking in one that is entirely financed from public funds. Moreover, comparisons of the amounts received in fees from year to year from different kinds of services will help to show which of the latter are in the greatest demand, and will create an incentive to expand these rather than other forms of activity.

On the other hand, if a service is intended to be entirely self-supporting financially, it will inevitably be rather costly to the users. Though good administration and concentration on essentials keep down the costs, nevertheless it is likely that many small industrialists who could benefit from the service will be deterred from doing so by the relatively high fees that will have to be charged. In most countries the combination of the grants and fees probably constitutes the most appropriate type of financial arrangement. In Bangladesh, the small industrialists are facing very much difficulty for paying high interest on loan that hampers the development of this sector. The following table gives an idea regarding the interest on industrial loan.

*Table 1 : Interest on Loan*

Name of financing institutions	Large and Medium Industry		Small-Scale Industry	
	2002	2007	2002	2007
Sonali Bank	9-13	12.5	11.5-12.0	12.0-12.5
Janata bank	10.0-12.0	11.0-12.58	11.5	10.0-12
Agrani Bank	10.0-12.0	13.0	11.5-12.0	12.0
Rupali Bank	10.0-12.0	12.5	11.0-12.0	12.0
BKB	10.0-13	11.5	12.0-13.5	10.0-11.5
BSB	10.0-12.0	10.0-12.0	10.0	10.0-11.0
RAKUB	12.5	12.0	10.0-12.5	12.0
BSRS	10.0-12.0	10.0-12.5	10.0	11.0
BASIC	13.0	11.5-13.5	11.5-12.0	11.5-12.5

*Source: Economic Review of Bangladesh -2007:50*

From the above table it is revealed that all most all the financing institutions have increased the interest rate on loan in 2007 in respect of 2002 whereas, it was supposed to reduce the rate of interest on loan in the immediate past industrial policy, 2005.

Although, the interest rate on loan has come down to 12.37 in the fiscal year of 2009-2010 from 13.46

in 2008-2009. But it has gone up high again in 2010-2011 to 12.52. So, the high interest rate is an impediment in the pace of industrial development (Economic Review of Bangladesh -2011:58).

It is fact as well as common belief that the success of service for small-scale industry very largely will depend upon the caliber of the staff. If there is any degree of specialization within the service the quality and qualifications required will vary in some degree according to the type or branch of activity concerned.

The combination of qualities makes a man a good management consultant. It may not be identical with the quality of a good classroom instructor in a vocational subject or of a good research worker. However, the extension service must demand of its staff in all branches a high standard technical knowledge and professional competence, quality of integrity and devotion, a sincere interest in their work, an ability to express themselves in simple language and a fair understanding of the jargon of the branch of the industry concerned. Moreover, since an extension worker, whatever his main specialization, is liable to have to turn his hands to a great variety of different jobs, versatility flair and imagination are of major importance.

These combinations of quality are rare indeed, even in highly developed countries, and still more in the less developed countries would be a false economy to try to save on the salaries of the staff. To get the right people it will be necessary to offer satisfying careers, with salaries and conditions of service comparing favorably with what men with the qualifications required can earn elsewhere in the country. If this means that fewer people can be employed, it will always be far better to have two first-rate men than three mediocrities.

#### *V.VII The Choice of Extension Method*

In many countries at different levels of development the establishment of national and regional technological centres or institutes or techno-economic institutes as a good way of organizing extension services for small-scale industries. Whatever the name given to the operational unit or units of the service, however questions arise as to the method to be adopted. Different methods of extension work are adapted to different purposes and the choice of method should largely depend upon the availability of resources with the view to matching the services with that industrial unit. The researcher like to divide the extension services into three groups which are as follows: a) the individual approach, in which direct contacts are maintained between the extension worker and the small industrial unit; b) the group approach through training classes, the establishment of pilot plants and other devices catering for groups of small industrialists and c) the mass approach through meetings, exhibitions and other mass media such as radio and films. The individual approach in disseminating technical information is a most effective

one, as the methods to be applied can be fully adapted to the particular conditions of the individual unit, taking into account the skills and aptitudes of the head of the firm and his workers and his financial and other resources. An individual approach is particularly effective when extension work is directed towards small-scale units which are mechanized or semi-mechanized and employ an applicable amount of hired labor: as the manufacturing unit grows in size and becomes technically and organizationally more complicated in comparison with domestic and cottage industries, improved methods and modern forms of industrial organization have to be adapted to specific individual requirements if the best results are to be obtained. If an individual approach is possible, the extension worker may review a variety of problems affecting the production and earning capacity of the unit, such as wastage of raw materials, technical innovations, plant layout, the quality of the production in relation to market conditions, need for simple administrative procedures and similar problems – these leading up to a review of the manufacturing unit as an organic whole, and to an appreciation of the interdependency of the steps that need to be taken. An important advantage of the individual approach is that it provides an opportunity for disseminating information both to the head of the firm and to the workers, which may contribute a general understanding within the unit of the advantages to labor and management alike of the measures proposed. On the other hand, in domestic and cottage industries, with only minor variations in methods and conditions of work among various units, the main emphasis may be placed on extension methods directed at groups of small industrialists, although here too there is scope to apply the individual approach.

The group approach is most effective when information to be given is generally applicable by selected groups of small industrialists of the same social and economic level and technical skills and where variations in methods and conditions of work in the individual units are not large. Thus, it may be used in providing training in simple management technique such as bookkeeping, elementary cost accounting and principle of cooperative actions. The group method may be supplemented by individual training, to meet specific demand of particular small enterprises. It is also a valuable device for providing general technical training in production techniques such as the use of new raw materials or the manufacture of new commodities within the scope of existing skills.

The group approach is more or less indispensable for the introduction of modern method which is only fully applicable through the joint effort of a group of small industrialists. For its efficient operation it requires close collaboration between the participating units and the common plant. It is so highly desirable that the small industrialists acquire a full understanding the

needs of their individual activities in conformity with the manufacturing and operational pattern of the common plant. Joint technical training under a group approach can help to install in the participating small industrialists an appreciation of the collective action which is the basis for success in this kind of industrial development. Of course, the mass approach cannot be expected to have the same result, in depth, as the individual or group approach in the teaching of new methods, especially when the training in these requires a certain education level or a degree of concentration or sustained activity. However, it has its value, especially for propaganda purposes. It can help by means of meetings, films, radio, exhibition and other media to create a livelier understanding of the place of small industry in the national economy and a keener awareness of the opportunity offered by modern method and forms of organization to raise the social and economic status of small industrialists and workers. Mass extension method may contribute to a change in outlook which is often important prerequisite of social and economic progress; they can most usefully supplement the individual and group approaches by preparing a ground for a fruitful application of specific methods and forms of organization.

Indeed all these three types of extension activities are complementary rather than competitive and may be usefully employed in collaboration. Thus, in the development of common servicing plants on a cooperative basis each of the three approaches may play its part; the individual approach to induce an influential member of small industrial community to take the lead in carrying out a comprehensive set of measures designed to modernize his plant; the group approach both for the training of a few understanding and management, and for demonstration and initial training of workers through establishment of pilot manufacturing plants and mass approach in order to arouse the interest of the industrial community to be served by such plants, initiate them in the basic principles of coordination development their loyal and service participation in the cooperative group through which the central plant is organized.

It is evident that the choice of extension approach will also be greatly influenced by the availability of funds and of qualified extension personnel. Being frequently understaffed and operating with limited financial resources, extension services usually faced dilemma. The mass approach may have some impact on a large number of people. The individual approach is likely to have a much deeper impact on a much smaller number. The group approach combines in different degrees the advantages and disadvantages of the other two approaches. The most effective combination depends upon circumstances and is a matter of judgment. This is one of the questions in respect of which research designed to appraise the effectiveness

of different services provided can be very helpful in providing a factual basis for sound decision.

#### *V.VIII Some Specific Extension Services*

Realizing the need of extension services to the small industrialists for the development of small-scale industry, the researcher shall have to more say about consultancy services, training, information, and research. However, the above mentioned extension services may be provided to an industrialist according to his/her need or suitability i.e. in some cases solely and in some cases two or more jointly.

#### *V.IX Individual Demonstration/Model Plants*

Training is much more effective when it accompanied by practical demonstration. It may sometimes be possible to persuade an individual small industrialist to allow his plant to be used as a demonstration plant. A progressive small industrialist may be selected who is prepared to apply improved methods suggested by extension worker and to allow others to visit his plant for the purpose of acquainting themselves with the benefit of improved techniques and methods of production, marketing and the increased earning capacity. Both the plant and owner-manager should be carefully selected and the plant should be reasonably representative of others in the industry and region so that those to whom improvements are demonstrated can see how to apply them in their own plants. Credit or other facilities may be employed to induce the small industrialist to have his plant used as a demonstration and information centre.

This method has the additional advantage of keeping the extension worker practical in this advice, as he can see for himself the financial consequences of his activities. In addition, the pooling of the more theoretical knowledge of the extension worker with the practical experience of a progressive small industrialist; increases the likelihood that the right solutions will be found for the problems encountered. This point is especially important as many extension workers are trained in institutions where technical operations are conducted under controlled conditions which generally differ considerably from those under which small industry actually operates.

Extension work performed through a selected individual demonstration plant offers only limited opportunities of providing actual training for workers from outside, for which adequate facilities are usually lacking in a plant that is already operating as going concern. This method thus serve mainly to demonstrate the improved of techniques applied consistently within an existing small industrial establishment with a view to encouraging other small industrialists to apply similar techniques. If for this purpose they or their workers need specific training, the extension method has to be supplemented, e.g. by itinerant demonstration and training units.

Demonstration projects may be valuable not only to managers and workers in individual plants selected as demonstration plants, and to others in the neighborhood who can see and copy the improvements made, but also as a means of providing training and experience for extension workers.

#### *V.X Demonstration and Training Plants*

A method of extension work whereby training in new techniques and methods of production is provided on a commercial basis may be arranged through the establishment of special plants for demonstration and training. Such plant are designed to reproduce actual operating conditions as accurately as possible and to ensure that training is carried out as an integrated part of the production process in the demonstration unit. Training can be placed on a realistic commercial footing and improved methods can be tested on their practical merits in actual production. This type of unit helps like the selected individuals demonstration plant, to assist the extension worker toward full recognition of actual working condition in small industry and thereby to make extension activities increasingly practical. An additional advantage is that the cost of training can be wholly or partly covered through sale of the products of the plant. The demonstration plant is especially effective when a new manufacturing process is to be introduced of which the community has no experience. In certain cases it may be appropriate to start with the training of the workers in those parts of the manufacturing process, if any they can carried on in the workers own homes, organized through the demonstration and training plant on a sub-contracting basis. As training is gradually extended to other processes as-well full-fledged small industrial units may develop, so that later the plant may be transferred to other areas for similar development work.

#### *V.XI Itinerant Demonstration and Training Team*

Extension work may be provided through itinerant demonstration and training teams. Through this team, training is given to small industrialists in specific methods of work. It is a useful technique for spreading training over a wide area than is possible through the establishment of training centres and demonstration plants. It is necessary for such training team to have a permanent training base. It needs to have an extension centre or a techno-economic institute. This permits two-way traffic to develop between the technical base and itinerant team. Earlier one (extension centre) channels a continuous flow of practical information and the later one (techno-economic institute) provides technical guidance steadily. This method of extension work can only be applied in cases where the training does not require elaborate training equipment or extensive accommodation. This method is suitable where the location of the industry is such that concentration of a number of units is found in widely dispersed areas. It

can be used for the improvement of specific skills within the existing technological and organizational framework of a particular small industry. The itinerant team ought to stay in any industrial community depending upon number of factors, including the nature of the technique to be imparted and might range from a few days to six months. Periodical follow-up visits by the team are advisable to assess the result of the training imparted and occasionally post training refresher courses may be needed. Follow-up with other appropriate extension methods have also to be considered. In case, it becomes clear in the course of the time that the technique imparted has not taken firm root in the community, it will be necessary to examine the need for revising either the technique in question or the method of training – or more likely, for removing certain other obstacles to progress, such as deficiencies in raw material supply, or credit or marketing arrangements.

Since institutional factors may greatly affect the applicability of improved methods, it will often be desirable to attach to itinerant team. In addition to technical specialists and instructors, extension workers are well versed in commercial problems and in general industrial organization. This will enable the team to approach the problems in an integrated manner by evolving appropriate measures to support technical modernization. To facilitate such a process, the team may also be authorized to recommend or advice on the disbursement of grants or loans through appropriate agencies. Thus links technical training with the supply of necessary material facilities. In appropriate cases cooperative specialists may usefully participate in the work of such team, suitable measures should in such cases be taken to ensure close collaboration and a common policy between industrial and cooperative services, if these operate as separate agencies.

#### *V.XII Marketing Arrangements*

The holding of marketing arrangement may be an effective method of disseminating useful information to small industrialists on the marketability of their products. Such an arrangement may in appropriate cases be conducted by itinerant demonstration and training teams. In suitable centres of small industrial production, exhibitions may be arranged of selected products manufactured in various small industrial units. These products are inspected and appraised by one or more specialists of the team, paying attention to feature of design and packing, quality, weight, size and other factors that affect marketability and price. On the basis of these appraisals, suggestions are made to each exhibitor as to ways of improving the marketability of his product and information is given to him regarding market requirements. Since, in many instances, small industry is not fully geared to the requirements of an expanding market economy, with its changing consumers' tastes and preferences, such marketing

arrangement may help small industry towards an intelligent appraisal of the place of its products in the market and of the measures to be taken to improve their salability.

## VI. FINDINGS OF THE STUDY

This paper has identified the different problems of small-scale industry sector as well as need-based and appropriate extension services for small-scale industry. Many findings have been extracted from the study and disclosed that the ignorance of small industrialists about the needs of the industrial units and of their own is one of the vital problems of this sector. On the other hand, need-based consultancy, trade-wise training and the easy availability of funds are the most appropriate extension services for this sector. Consultancy and training programme may be the best weapon of making the owners, managers as well as employees-workers aware of the needs and future doings for the development of their units. Mutual cooperation and coordination between the government agencies and industrialists' associations is essential for paving the way of providing appropriate extension services to small-scale industry. Well staffing is also helpful for keeping congenial environment in the industrial unit that may increase production, interaction among the inside people and thus makes the industry long lasting. Itinerant demonstration and training team is very much helpful to the small industrialists for making them skilled as well as meting their needs. Lack of proper evaluation, implementation and monitoring of the project has been found as the ultimate problem in developing this sector that hinders the extension services to small-scale industry sector.

## VII. SUGGESTIONS AND RECOMMENDATIONS

Many problems that are facing by small-scale industrial units and small industrialists regarding extension services have been found out from the endeavor made by the researcher. Suggestions and recommendations have been given for finding out the problems and scrutinizing the appropriateness of extension services to small-scale industry as well as small industrialists for future within the purview of the study. The study recommended as follows:

1. The major/usual and even the trifling problems should be identified. The itinerant Demonstration team can play a vital role in this regard staying in the small undertakings for a reasonable time.
2. The need-based extension services have to be selected for individual industrial undertakings.
3. The itinerant demonstration team should be consists of chemical engineer, mechanical engineer and some field officers in conformity with other developing countries of the world.
4. Frequent consultancies have to be held with the

owners, managers as well as employees and workers and imparted them to trade-wise training and acknowledged about new technology.

5. Easy availability of funds has to be ensured to small industrialists.
6. Maintain a good coordination between the government agencies and small industrialists' associations. These associations have to be strengthened through the strong patronization of the government. The associations have to play significant role for the interest of obtaining appropriate extension services and if necessary bargain with competent authority.
7. The owners and the managers should be imparted a special training for marketing the products and well staffing in their units.
8. A strong and pragmatic implementation and monitoring cell have been formed to implement and monitor the projects. The authority assigned for performing this task has to be empowered adequately.
9. A panel of experts in Industrial Management in underdeveloped countries should be formed consisting of the interested people in this direction.
10. For strengthening the research work much more fellowships have to be managed from different international organizations as well as the existing documentation and information centre at divisional level should be enriched and a rich documentation and information centre should be set up at each district for easy availability of information regarding small-scale industry.

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